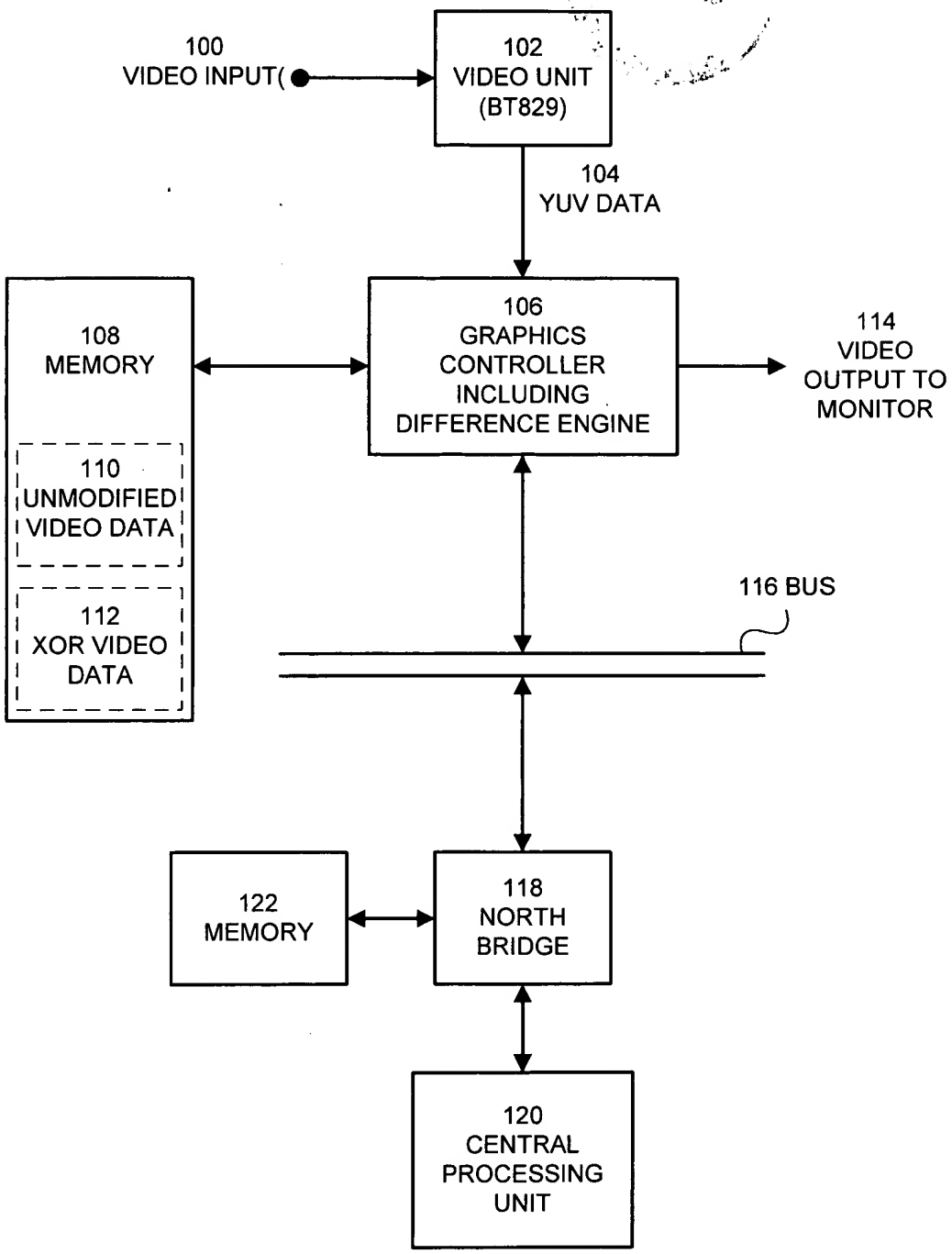
100
VIDEO INPUT(
102
VIDEO UNIT
(BT829)
104
YUV DATA
108
MEMORY
110
UNMODIFIED
VIDEO DATA
112
XOR VIDEO
DATA
106
GRAPHICS
CONTROLLER
INCLUDING
DIFFERENCE ENGINE
114
VIDEO
OUTPUT TO
MONITOR
116 BUS
122
MEMORY
118
NORTH
BRIDGE
120
CENTRAL
PROCESSING
UNIT

FIG. 1

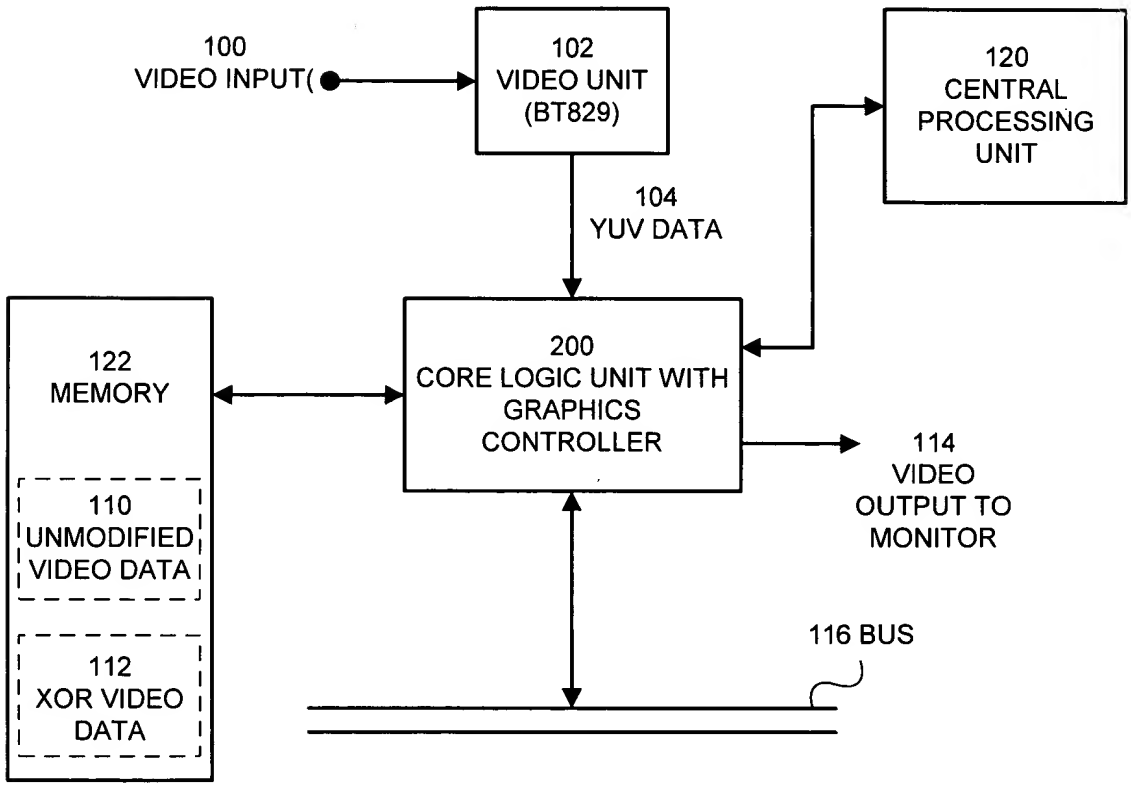
100
VIDEO INPUT(
102
VIDEO UNIT
(BT829)
120
CENTRAL
PROCESSING
UNIT
104
YUV DATA
122
MEMORY
200
CORE LOGIC UNIT WITH
GRAPHICS
CONTROLLER
114
VIDEO
OUTPUT TO
MONITOR
110
UNMODIFIED
VIDEO DATA
112
XOR VIDEO
DATA
116 BUS

FIG. 2

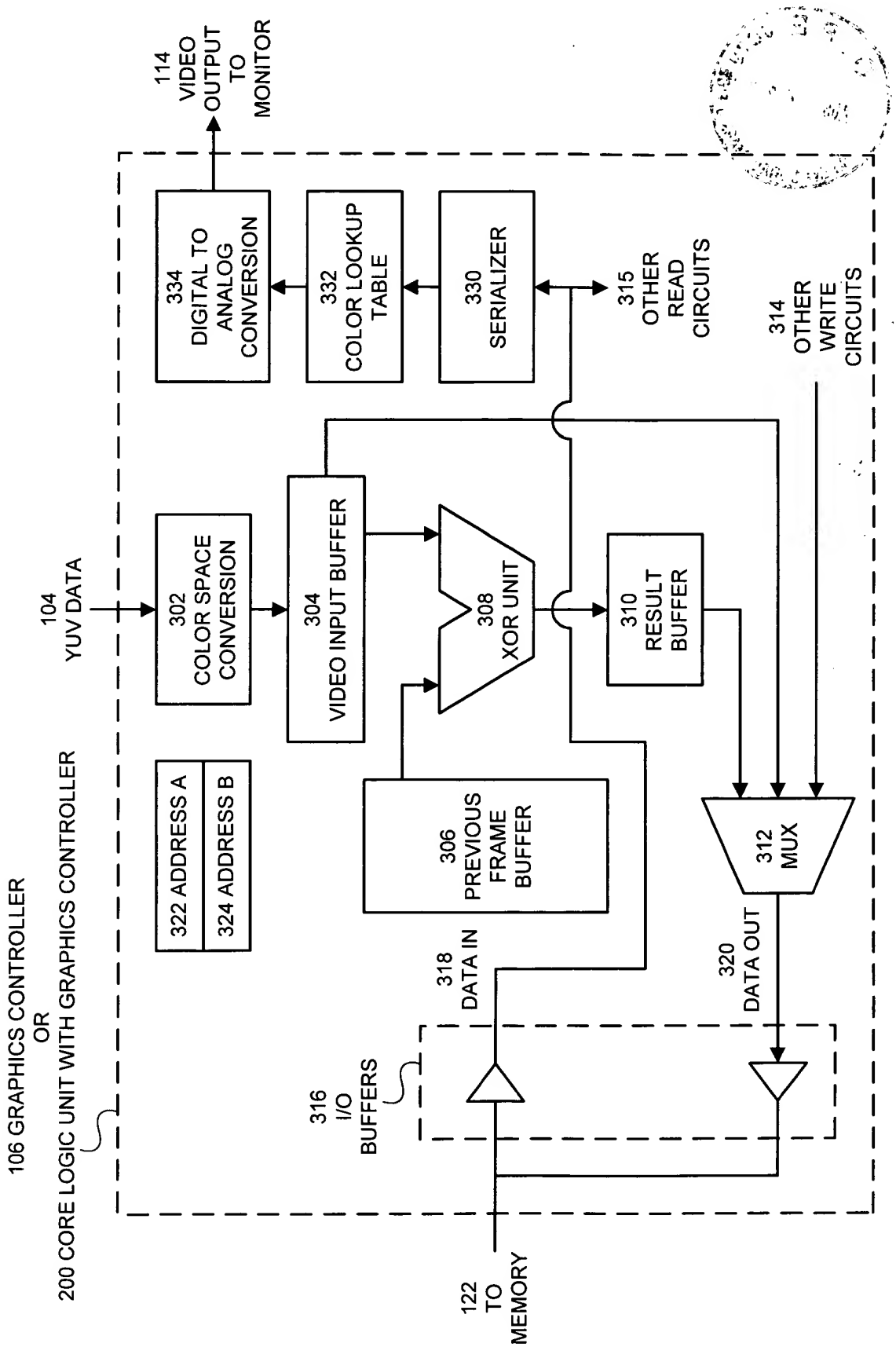
114 VIDEO OUTPUT TO MONITOR
334 DIGITAL TO ANALOG CONVERSION
332 COLOR LOOKUP TABLE
330 SERIALIZER
315 OTHER READ CIRCUITS
314 OTHER WRITE CIRCUITS
104 YUV DATA
302 COLOR SPACE CONVERSION
304 VIDEO INPUT BUFFER
308 XOR UNIT
310 RESULT BUFFER
322 ADDRESS A
324 ADDRESS B
306 PREVIOUS FRAME BUFFER
312 MUX
318 DATA IN
320 DATA OUT
316 I/O BUFFERS
122 TO MEMORY
106 GRAPHICS CONTROLLER OR 200 CORE LOGIC UNIT WITH GRAPHICS CONTROLLER

FIG. 3

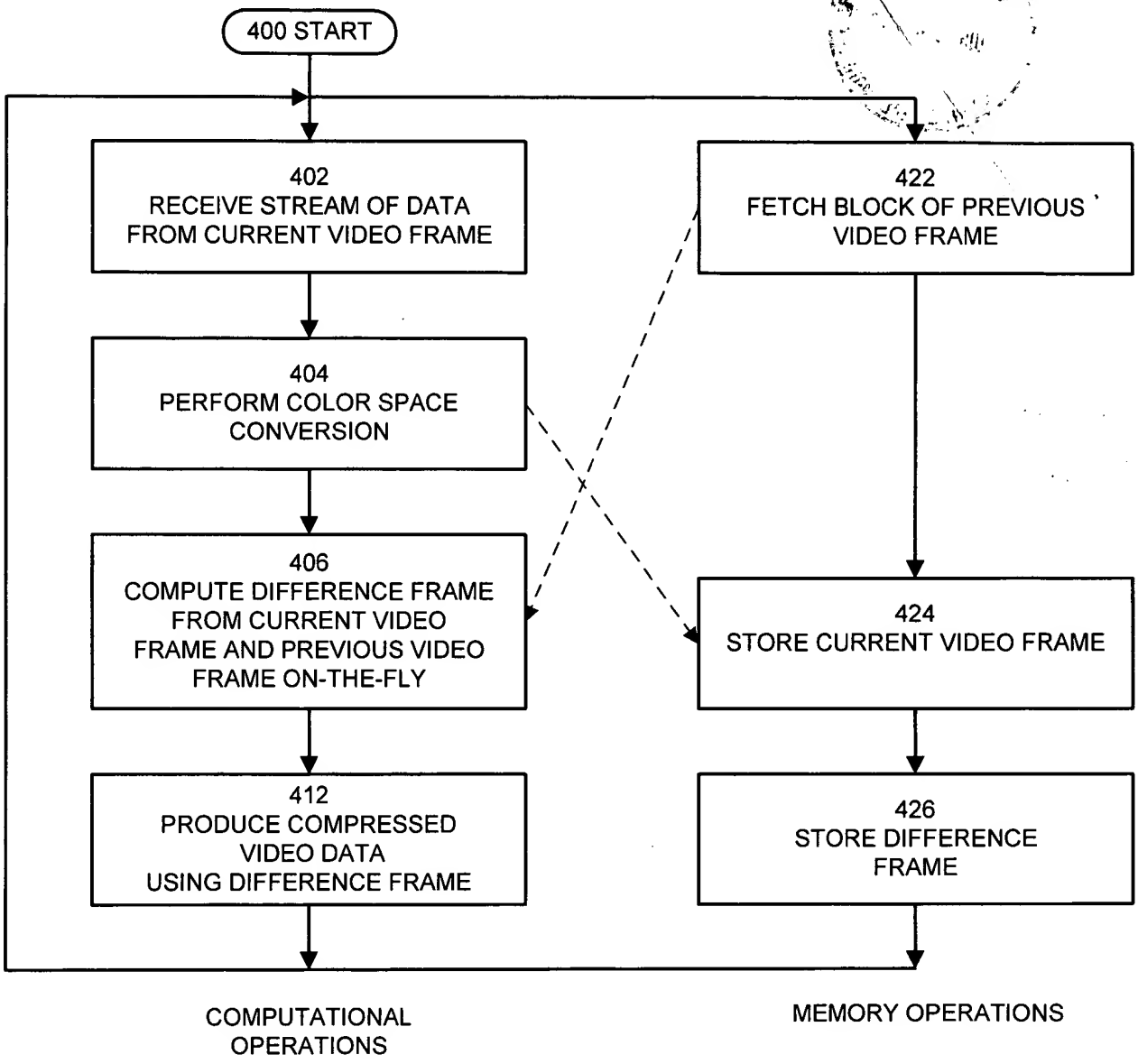
400 START
402
RECEIVE STREAM OF DATA FROM CURRENT VIDEO FRAME
404
PERFORM COLOR SPACE CONVERSION
406
COMPUTE DIFFERENCE FRAME FROM CURRENT VIDEO FRAME AND PREVIOUS VIDEO FRAME ON-THE-FLY
412
PRODUCE COMPRESSED VIDEO DATA USING DIFFERENCE FRAME
422
FETCH BLOCK OF PREVIOUS VIDEO FRAME
424
STORE CURRENT VIDEO FRAME
426
STORE DIFFERENCE FRAME
COMPUTATIONAL OPERATIONS
MEMORY OPERATIONS

FIG. 4